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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,574	10/09/2001	Michael Waring	A33882-007220.0135	6030
21003	7590	02/12/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			NICOLAS, WESLEY A	
			ART UNIT	PAPER NUMBER

1742

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/973,574	<b>Applicant(s)</b> WARING ET AL.	
	<b>Examiner</b> Wesley A. Nicolas	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13, 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

This is in response to the response to the restriction dated June 20, 2003. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-15 are currently pending in this application, with claims 6-7 and 14 directed to a non-elected invention.

### ***Election/Restriction***

1. Claims 6-7 and 14 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the paper submitted June 20, 2003.

### ***Claim Objections***

2. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 5 is directed to a limitation already recited in the parent independent claim, namely a "pH of about 1.0 to 3.0".

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vega et al. (U.S. 6,440,290 B1), and further in view of Stadler et al. (5,750,014).

Regarding claim 1, Vega et al. teach of a process for treating a part comprising:

- providing a process tank capable of receiving at least one part (cols. 1 and 2 - a tank would be inherently present in order to hold the solution);
- providing an alkaline first solution into the process tank (Fig. 1, "Alkaline and/or Acidic Cleaner");
- providing a deoxidizing second solution into the process tank (Fig. 1, "Deoxidizer");
- providing a third coating solution having a pH of about 1.0 to about 3.0 into the process tank (claim 1: "(c)...phosphoric acid").

Vega et al. fail to specifically teach of supplying each solution (*i.e.* first, second, third, etc.) from a storage tank and removing each solution from the process tank and putting it in a transition tank.

Stadler et al. teach the supplying of each solution (*i.e.* first, second, third, etc.) from a storage tank (Fig. 1, numerals 32, 34, 36, and 38) and removing each solution from the process tank and putting it in a transition tank (Fig 1: "To waste treatment").

Claim 1 is rejected because it would have been obvious and within the ordinary skill in the art at the time the invention was made to have modified Mnich to use one process chamber and pumped multiple solutions into said chamber as taught by Stadler et al. because Stadler et al. teach that the substrate remains in one process chamber (Fig. 1, numeral 14) which would have minimized movement of the articles to be treated (cols. 4 and 5).

Claim 2 is rejected because Vega et al. teach that the second solution is a deoxidizer (Fig. 1, "Deoxidizer").

Claim 4 is rejected because Vega et al. teach that the third solution comprises nitric acid (col. 2, lines 48-53).

It appears that claim 4 has a typographical error, namely that the third solution and not the second should comprise nitric acid, consistent with claim 11 which refers to the deoxidizing solution comprising nitric acid. As such, Examiner is interpreting claim 4 to refer to the second "deoxidizing" solution.

Although Claim 5 is rejected because Vega et al. teach that the third solution has a pH of about 1.0-3.0 (claim 1: "(c)....phosphoric acid").

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6. Claims 1-5, 8-13, and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Mnich (U.S. 6,440,290 B1), and further in view of Stadler et al. (5,750,014).

Regarding claim 1, Mnich teaches of a process for treating a part comprising:

- providing a process tank capable of receiving at least one part (col. 7, line 12: "immersing workpiece"... a tank would be inherently present in order to hold the solution);
- providing an alkaline first solution into the process tank (Fig. 3, "alkaline cleaner");
- providing a deoxidizing second solution into the process tank (Fig. 3, "deoxidize");
- providing a third coating solution having a pH of about 1.0 to about 3.0 into the process tank (claim 1: "phosphoric acid"). A 10-20% solution of phosphoric acid (col. 5, lines 45-50 would inherently have a pH of between 1.0 and 3.0.

Regarding claim 8, Mnich teaches of a process for treating a part comprising:

- providing a process tank capable of receiving at least one part (col. 7, line 12: "immersing workpiece"... a tank would be inherently present in order to hold the solution);
- providing an alkaline first solution into the process tank (Fig. 3, "alkaline cleaner");
- providing a chemical polishing second solution into the process tank (col. 5, lines 26-44);
- providing a third deoxidizing solution into the process tank (Fig. 3, "deoxidize");
- providing a fourth anodizing solution into the process tank (claim 1: "phosphoric acid");

Regarding claim 15, Mnich teaches of a process for treating a part comprising:

- providing a process tank capable of receiving at least one part (col. 7, line 12: "immersing workpiece"... a tank would be inherently present in order to hold the solution);
- providing an alkaline solution into the process tank (Fig. 3, "alkaline cleaner");
- providing a deoxidizing solution into the process tank (Fig. 3, "deoxidize");
- providing a anodizing solution into the process tank (claim 1: "phosphoric acid");

Mnich fails to specifically teach of supplying each solution (*i.e.* first, second, third, etc.) from a storage tank and removing each solution from the process tank and putting it in a transition tank, or the use of a dichromate sealing solution or a sixth coating solution.

Stadler et al. teach the supplying of each solution (*i.e.* first, second, third, etc.) from a storage tank (Fig. 1, numerals 32, 34, 36, and 38) and removing each solution from the process tank and putting it in a transition tank (Fig 1: "To waste treatment"), and further teach of a dichromate sealing solution (col. 6, line 57 to col. 7, line 22).

Claims 1, 3, 8, 10, 13, and 15 are rejected because it would have been obvious and within the ordinary skill in the art at the time the invention was made to have modified Mnich to use one process chamber and pumped multiple solutions into said chamber as taught by Stadler et al. because Stadler et al. teach that the substrate remains in one process chamber (Fig. 1, numeral 14) which would have minimized movement of the articles to be treated (cols. 4 and 5).

Furthermore, although Mnich fails to specifically teach the use of a dichromate sealing solution, it would have been obvious and within the ordinary skill in the art at the

time the invention was made to have modified Mnich to use the dichromate sealing solution of Stadler et al. because Stadler et al. teach that the use of a dichromate sealing solution (col. 6, line 57 to col. 7, line 22) would have provided desirable properties for the substrate surface.

Regarding claims 8 and 15, although neither Mnich nor Stadler et al. teach of a sixth coating solution, use of another coating solution process tank is considered to be duplication of parts and mere duplication of parts has little patentable significance unless new and unexpected results are produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Here, the addition of an additional coating would have been obvious and within the ordinary skill in the art at the time the invention was made because Stadler et al. teach that an additional coating (col. 7, lines 15-22: "Teflon®") such as Teflon® Can additionally be added to the substrate to enhance its self lubricating properties.

Claim 2 is rejected because Mnich teaches that the second solution is a deoxidizer (Fig. 3, "deoxidize").

Claim 4 is rejected because Mnich teaches that the third solution comprises nitric acid (col. 5, lines 26-44).

It appears that claim 4 has a typographical error, namely that the third solution and not the second should comprise nitric acid, consistent with claim 11 which refers to the deoxidizing solution comprising nitric acid. As such, Examiner is interpreting claim 4 to refer to the second "deoxidizing" solution.

Claim 5 is rejected because Mnich teaches that the third solution has a pH of about 1.0-3.0 (claim 1: "phosphoric acid"). A 10-20% solution of phosphoric acid (col. 5, lines 45-50) would inherently have a pH of between 1.0 and 3.0.

Claim 9 is rejected because Mnich teaches that the second solution is a deoxidizer (Fig. 3, "deoxidize").

Claim 11 is rejected because Mnich teaches that the third solution comprises nitric acid (col. 5, lines 26-44).


Claim 12 is rejected because Mnich teaches that the third solution has a pH of about 1.0-3.0 (claim 1: "phosphoric acid"). A 10-20% solution of phosphoric acid (col. 5, lines 45-50) would inherently have a pH of between 1.0 and 3.0.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Nicolas whose telephone number is (571) 272-1247. The examiner can normally be reached on Mon.-Thurs. from 7 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached at (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**WESLEY A. NICOLAS**  
**PATENT EXAMINER**

February 5, 2004